



**Community Development and
Neighborhood Services**

281 North College Avenue
PO Box 580
Fort Collins, CO 80522

970.221.6750

970.224.6134 - fax

fcgov.com/developmentreview

July 29, 2016

Cathy Mathis
TB GROUP
444 MOUNTAIN AVENUE
Berthoud, CO 80525

RE: 2590 Midpoint Drive, PDP160010, Round Number 4

Please see the following summary of comments from City staff and outside reviewing agencies for your submittal of the above referenced project. If you have questions about any comments, you may contact the individual commenter or direct your questions through the Project Planner, Meaghan Overton, at 970-416-2283 or moverton@fcgov.com.

Comment Summary:

Department: Stormwater Engineering

Contact: Dan Mogen, 970-224-6192, dmogen@fcgov.com

Topic: General

Comment Number: 3

Comment Originated: 04/12/2016

05/18/2016: Please expand report narrative to explain the proposed scenario with the northern detention pond. Will the outlet structure need to be modified? If so, provide detail. Please also show proposed grading in this area.

04/12/2016: It is noted that Basin 1 will be sharing a detention basin with the adjacent property. It doesn't appear that easement will be required as the properties are owned by the same party. Please document the required volume for the adjacent property or include in the basin sizing calculations.

RESPONSE: The Report has been expanded with regard to the shared pond and shared outlet structure has been sized accordingly. Details are included in the report and on the detail sheets.

Comment Number: 5

Comment Originated: 04/12/2016

05/18/2016: Comment still applies. Slight discrepancies are seen, likely due to the equation used (see redlines).

RESPONSE: Updated as requested.

04/12/2016: Please review the time of concentration and associated rainfall

intensities using in the runoff calculations.

RESPONSE: Updated as requested.

Comment Number: 6

Comment Originated: 04/12/2016

05/18/2016: Please provide historic basin calculations to support the proposed release rate.

RESPONSE: Historic 2-year flow rate has been included.

04/12/2016: What is sub-basin P1? It is seen in the calculations, but other references remain unseen.

RESPONSE: Subbasin descriptions have been updated accordingly.

Comment Number: 9

Comment Originated: 04/12/2016

05/18/2016: Comment still applies.

RESPONSE: Revised as requested.

04/12/2016: How was the designed outfall rate of 0.14 cfs/acre determined? Please show calculation for 2-year historic runoff rate.

RESPONSE: 2-year historic flow rate has been determined and is now being used for the outflow rate.

Comment Number: 10

Comment Originated: 04/12/2016

05/18/2016: Comment still applies.

RESPONSE: Updated as requested.

04/12/2016: Please expand the drainage report narrative overall to give a better understanding of the proposed development. A number of things are currently unclear with the project including how the LID requirements are being met and what is ultimately being proposed for the 2 detention basins. Are both water quality and LID being proposed for the detention basin bottoms? Please expand to help clarify the overall design.

RESPONSE: Report includes information on the use of Rain Gardens for both detention basins.

Comment Number: 11

Comment Originated: 04/12/2016

05/18/2016: Please see redlined table.

RESPONSE: LID Table updated as requested.

04/12/2016: Please discuss and document how LID requirements are being met. A table would be helpful for this and a sample table can be downloaded at: <http://tinyurl.com/SampleLIDTable>.

RESPONSE: Table is now included in both the Report and in the civil plans.

Comment Number: 13

Comment Originated: 04/12/2016

05/18/2016: Please see updated redlined plans and drainage report. Please return with resubmittal.

RESPONSE: Updated as requested.

04/12/2016: Please see redlined plans and drainage report. Please return with resubmittal.

RESPONSE: Noted.

Comment Number: 14

Comment Originated: 04/12/2016

05/18/2016: Comment still applies.

RESPONSE: Revised as requested.

04/12/2016: Please note that additional comments may be forthcoming upon future submittals as additional details are discovered.

RESPONSE: Acknowledged

Comment Number: 15

Comment Originated: 05/18/2016

05/18/2016: Are any plantings proposed within the proposed rain gardens? It appears that sod is proposed for the southern rain garden, please note that sod cannot be used in this location and will need to be seeded if grass is desired. Please also remove the weed barrier from the northern rain garden.

RESPONSE: See Landscape Plan for information.

Comment Number: 16

Comment Originated: 05/18/2016

05/18/2016: Please provide a drainage easement for the proposed rain gardens and detention basins at least up to the 100-year water surface elevation.

RESPONSE: Easement is called out on plans and will be recorded once final approval is obtained.

Comment Number: 17

Comment Originated: 05/18/2016

05/18/2016: Overall, it appears that the proposed design is acceptable; however, expanded narrative in the report and additional detail in the plans are needed in order to better understand the proposed conditions and how the system overall will function.

RESPONSE: Report descriptions have been expanded as requested.

Additional Comments received via email from Dan:

1. I see the "front" detention pond is called out on the site plan; however, it doesn't appear that there is an easement proposed for this area. Please provide easement for this pond.
Add a label to the site and utility plans noting that the entire front detention pond will be in an easement. We will add this.
2. The "lot line" detention pond should be called out on the site plan. I see from the drainage plan that there is a proposed easement to cover this ponding area; however, it is not shown on the site plan.
Add a label to the site plan to show the drainage easement for the lot line detention pond. On the utility plan, this is noted as "100 yr water surface elevation – easement" We will add this.
3. The landscape plan calls out "non-irrigated native." Please add that this will be seed for completeness.
This correction can wait for FDP Cathy- Noted.
4. It looks like the release rate can be ~3 times what it is currently proposed to be. Please see redlined report attached. I don't believe this will change much on the site plan as those detention basins are now bigger than they will likely need to be; however, it will change a number of other calculations.
These corrections can wait for FDP. Changing this would not change the required volume by much more than 300 cf less than what we are currently proposing, I'd prefer to leave the calculations as is.
5. From the grading plan, it appears that there is a sizeable area at the entrance that does not drain to either basin. This area needs to be addressed and either drain to one of the detention basins or be justified in why it cannot be detained. I've attached a screenshot of this area and a couple other comments on the utility plans.
Please clarify/address. Due to the existing grades of the site being substantially higher than the adjacent roadway and the storm outlet, there is no possible way to catch this water and drain it into one of the proposed ponds. If the building FFE was changed to accommodate the entrance drive drainage, it would require the property owner to obtain grading easements from the neighboring property and the ponds would have to be below the outlets. Due to the elevations of the proposed ponds and the FL elevations on the entrance drive, if these were connected runoff would flow from the ponds into the entrance drive in higher storm events.

Department: Technical Services

Contact: Jeff County, 970-221-6588, jcounty@fcgov.com

Topic: Construction Drawings

Comment Number: 11

Comment Originated: 04/13/2016

06/16/2016: This has not been corrected.

RESPONSE: Benchmark statements match on all sheets.

05/17/2016: This has not been corrected.

04/13/2016: All benchmark statements must match on all sheets.

Department: Water Conservation

Contact: Eric Olson, 970-221-6704, eolson@fcgov.com

Topic: General

Comment Number: 1

Comment Originated: 04/11/2016

04/11/2016: Irrigation plans are required no later than at the time of building permit. The irrigation plans must comply with the provisions outlined in Section 3.2.1(J) of the Land Use Code. Direct questions concerning irrigation requirements to Eric Olson, at 221-6704 or eolson@fcgov.com

RESPONSE: Acknowledged.

Department: Water-Wastewater Engineering

Contact: Dan Mogen, 970-224-6192, dmogen@fcgov.com

Topic: General

Comment Number: 2

Comment Originated: 04/12/2016

05/18/2016: I've noted that the service has been changed to 4" and can connect to the main via wye. This requires a minimum slope of 2% (1% is proposed).

RESPONSE: Slope of 4" sanitary line has been updated to a 2% slope with a wye connection.

04/12/2016: A 6" sanitary service connection into an 8" main requires either connecting at a manhole or cutting in a tee.

Comment Number: 6

Comment Originated: 04/12/2016

05/18/2016: Please see updated redlined report and plans and return with resubmittal.

RESPONSE: Redlines have been addressed and will be returned with our next submittal.

04/12/2016: Please see redlines and return with resubmittal.

Comment Number: 7

Comment Originated: 04/12/2016

05/18/2016: Comment still applies.

RESPONSE: Acknowledged.

04/12/2016: Please note that additional comments may be forthcoming upon future submittals as additional details are discovered.

Department: Zoning

Contact: Noah Beals, 970-416-2313, nbeals@fcgov.com

Topic: General

Comment Number: 3

Comment Originated: 04/12/2016

05/10/2016: The area labeled as recycle asphalt appears to be storage area.
Please include screening around this entire area.

RESPONSE: The area is now fenced with a 6' solid privacy fence, similar to LEI's. The existing fences have been labeled.

04/12/2016: Please identify the fence material of the existing fence? Will it provide screening? Is it more than chain link?